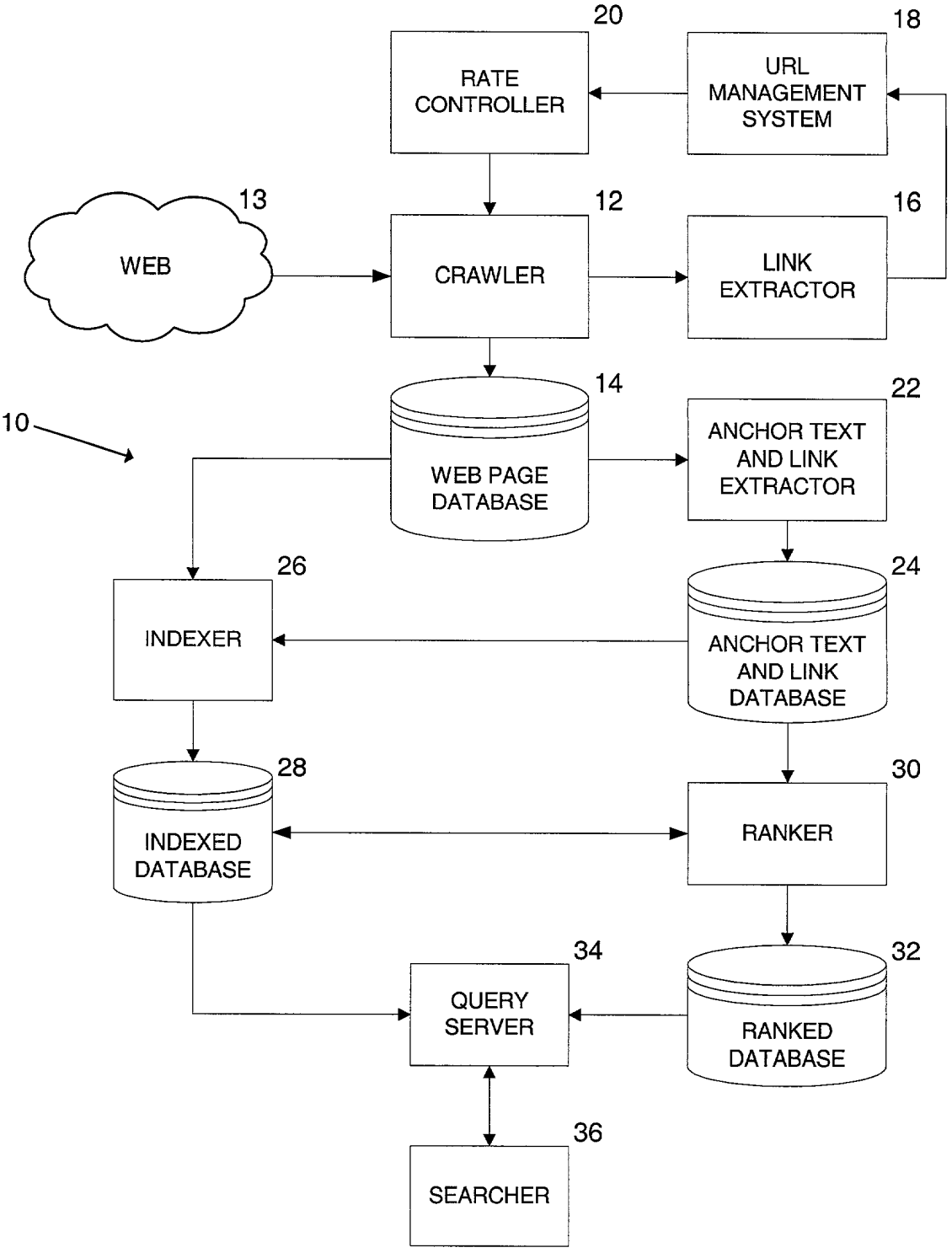

20
18
RATE CONTROLLER
URL MANAGEMENT SYSTEM
13
12
16
WEB
CRAWLER
LINK EXTRACTOR
14
22
10
WEB PAGE DATABASE
ANCHOR TEXT AND LINK EXTRACTOR
26
24
INDEXER
ANCHOR TEXT AND LINK DATABASE
28
30
INDEXED DATABASE
RANKER
34
32
QUERY SERVER
RANKED DATABASE
36
SEARCHER

FIGURE 1

FIGURE 2A

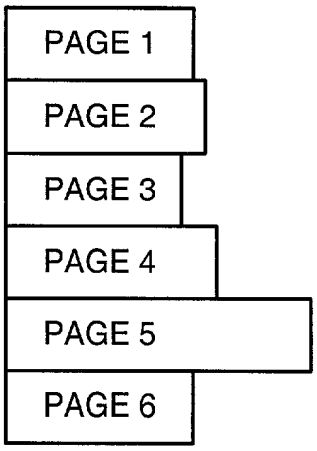
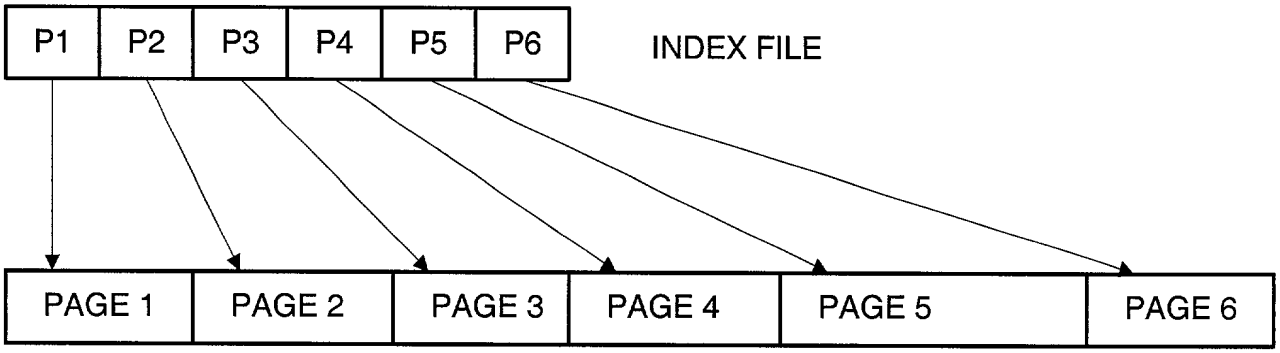
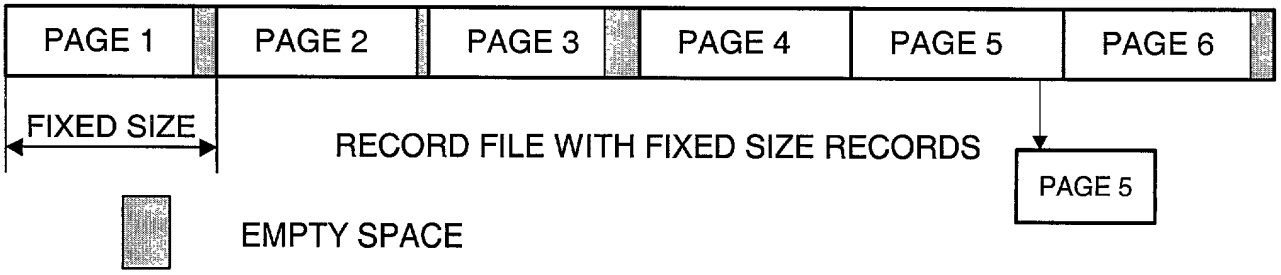


FIGURE 2B



RECORD FILE WITH VARIOUS SIZE RECORDS

FIGURE 2C



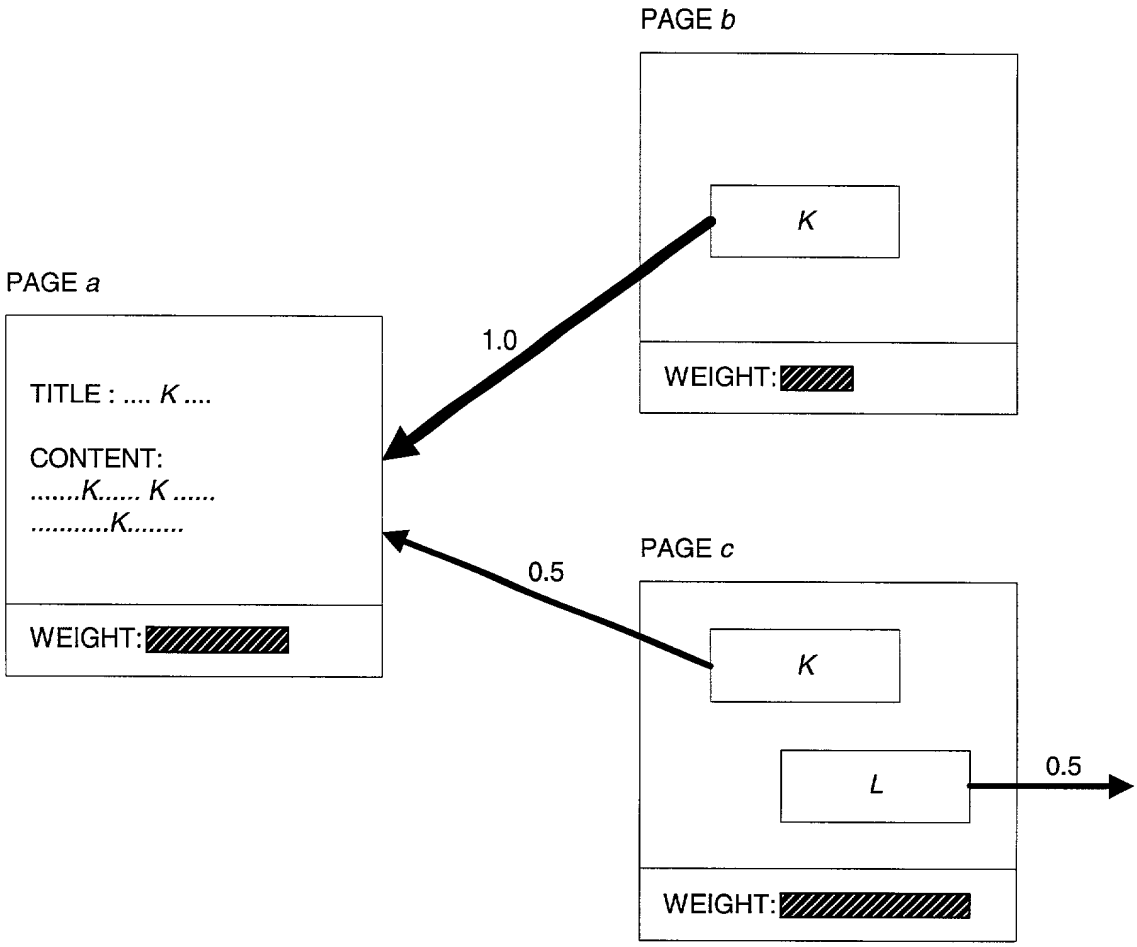

PAGE b
K
WEIGHT:
PAGE a
1.0
TITLE : .... K ....
CONTENT:
.....K..... K .....
.....K.....
WEIGHT:
0.5
PAGE c
K
L
0.5
WEIGHT:

FIGURE 3

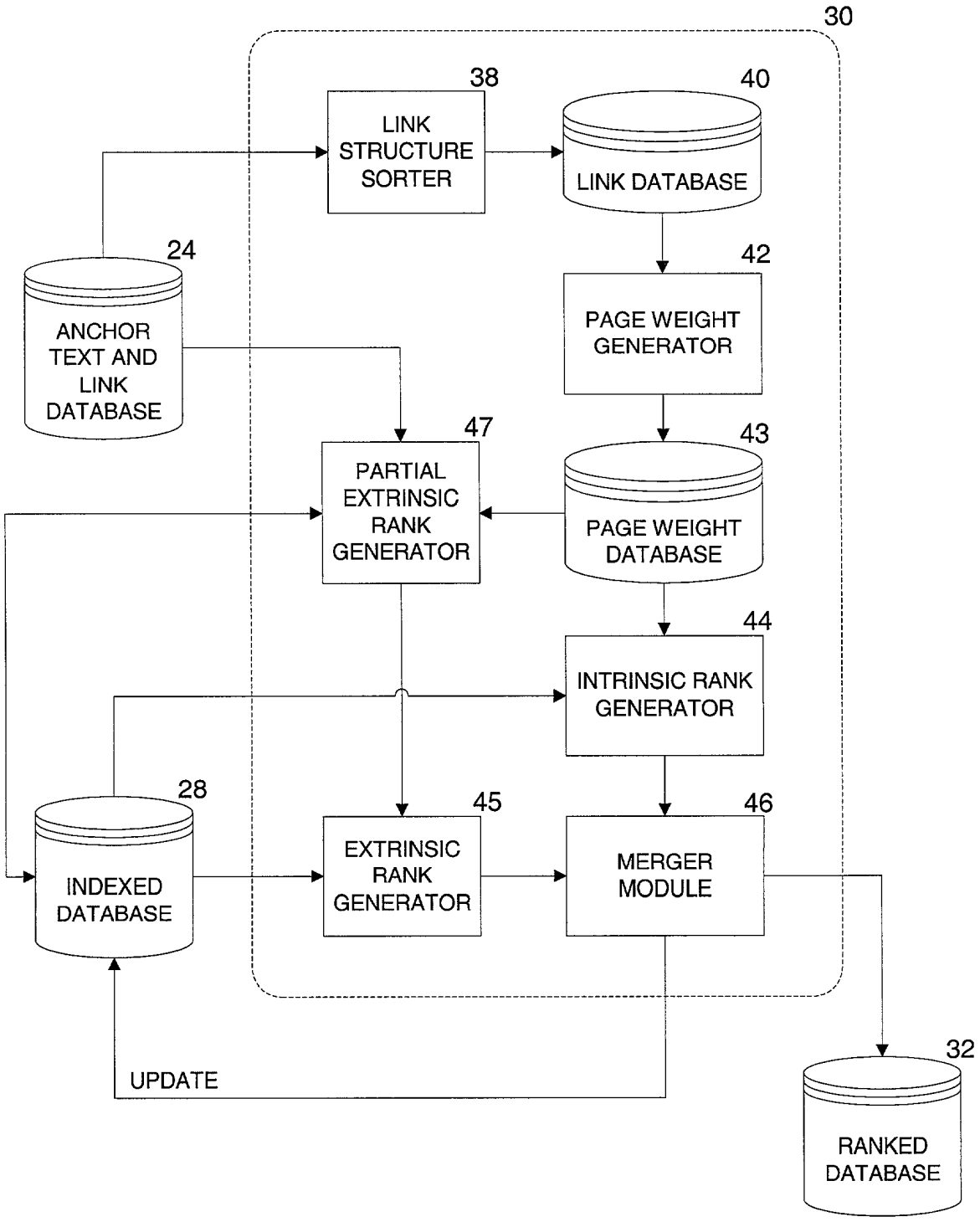

30
38
LINK STRUCTURE SORTER
40
LINK DATABASE
24
ANCHOR TEXT AND LINK DATABASE
42
PAGE WEIGHT GENERATOR
47
PARTIAL EXTRINSIC RANK GENERATOR
43
PAGE WEIGHT DATABASE
44
INTRINSIC RANK GENERATOR
28
INDEXED DATABASE
45
EXTRINSIC RANK GENERATOR
46
MERGER MODULE
32
RANKED DATABASE
UPDATE

FIGURE 4

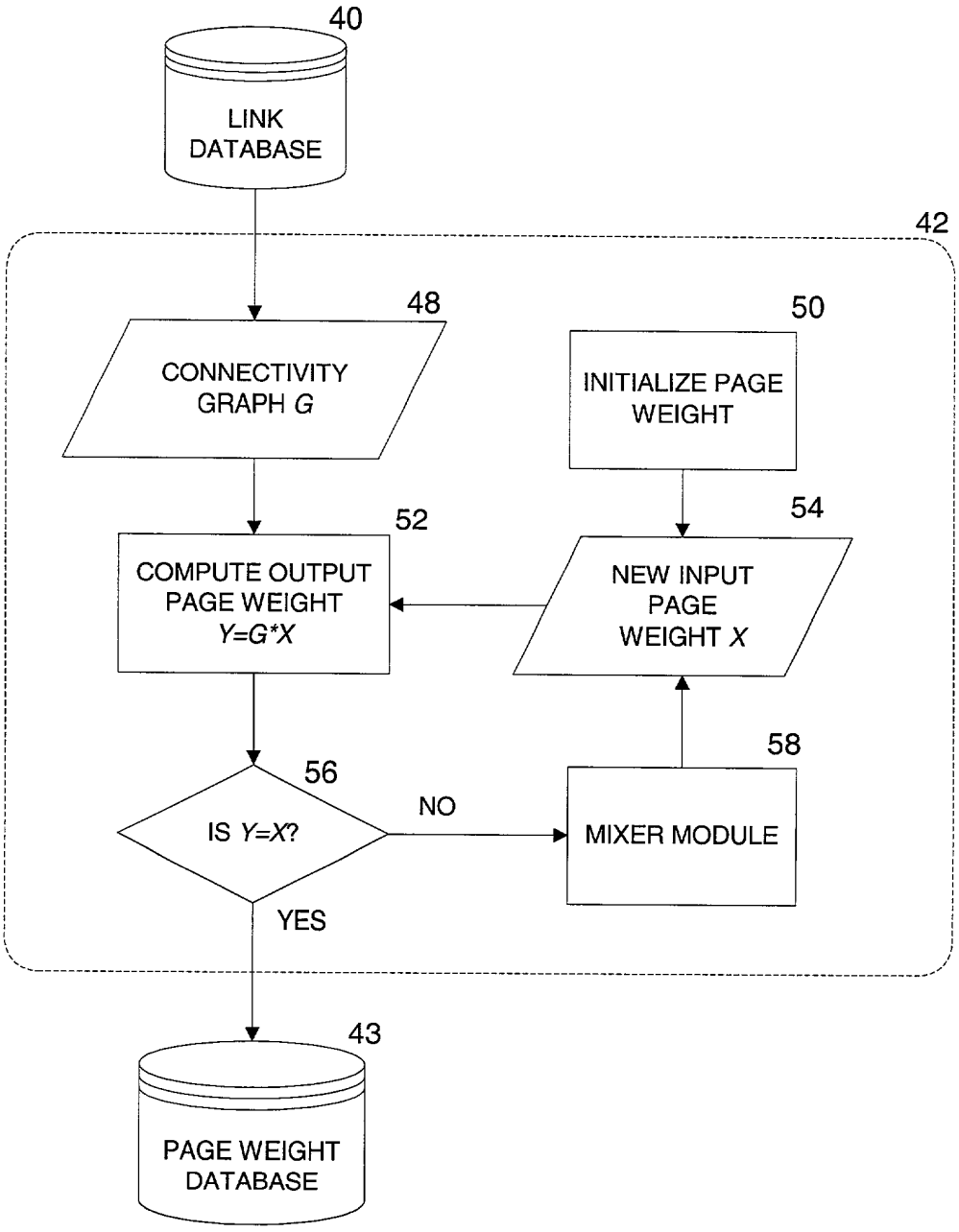

40
LINK DATABASE
42
48
CONNECTIVITY GRAPH G
50
INITIALIZE PAGE WEIGHT
52
COMPUTE OUTPUT PAGE WEIGHT Y=G*X
54
NEW INPUT PAGE WEIGHT X
56
IS Y=X?
NO
58
MIXER MODULE
YES
43
PAGE WEIGHT DATABASE

FIGURE 5

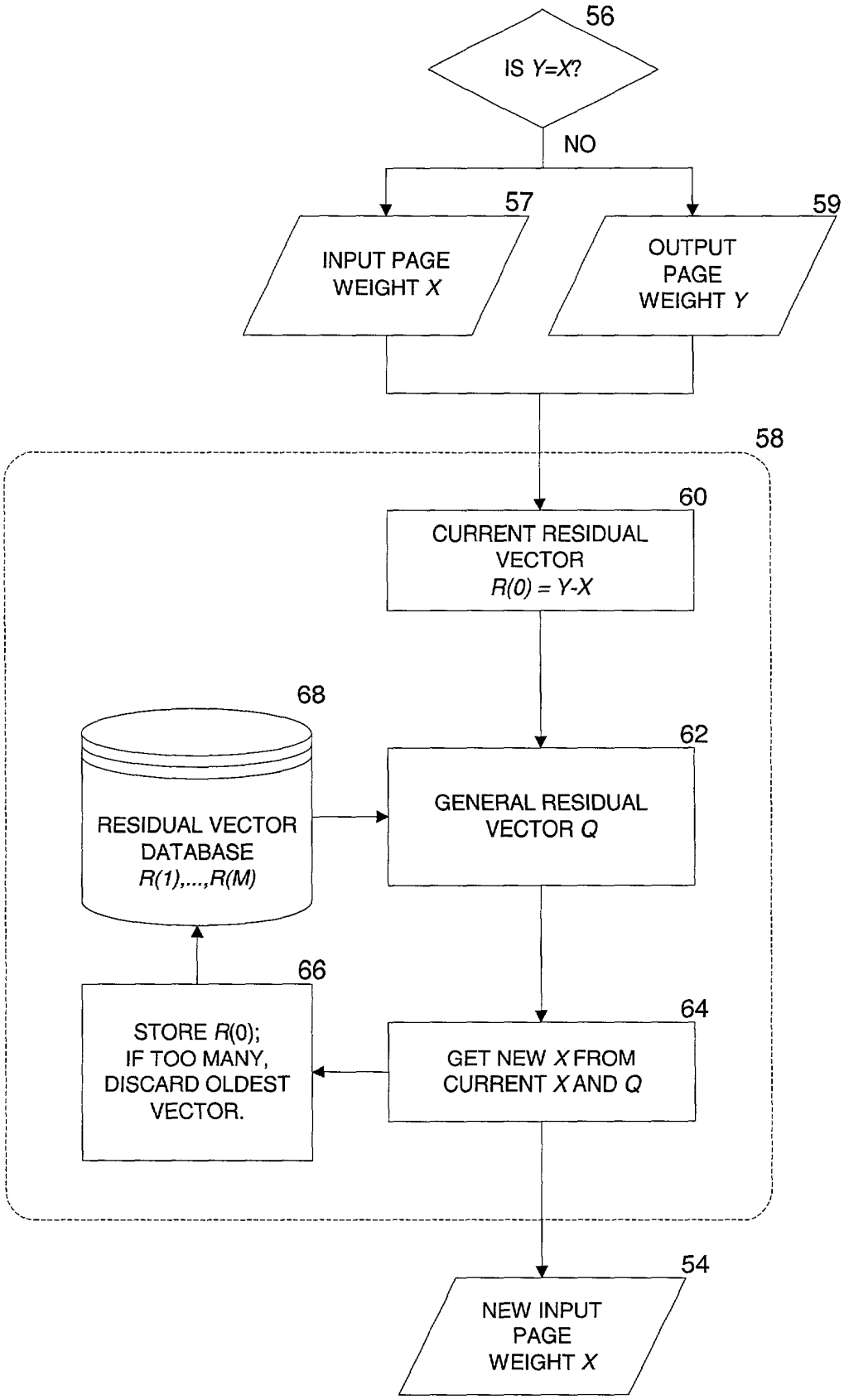

56
IS Y=X?
NO
57
INPUT PAGE WEIGHT X
59
OUTPUT PAGE WEIGHT Y
58
60
CURRENT RESIDUAL VECTOR R(0) = Y-X
68
RESIDUAL VECTOR DATABASE R(1),...,R(M)
62
GENERAL RESIDUAL VECTOR Q
66
STORE R(0); IF TOO MANY, DISCARD OLDEST VECTOR.
64
GET NEW X FROM CURRENT X AND Q
54
NEW INPUT PAGE WEIGHT X

FIGURE 6